ELSEVIER

Journal of Controlled Release 56 (1998) 309–310

journal of controlled release

Contents Volume 56 (1998)

Vol. 56, Nos. 1–3 (4 DECEMBER 1998)

In vitro release of cytarabine from swellable matrices of $C_nE_mC_n$ triblock copolymers
M. Ameri, J.H. Collett, D. Attwood and C. Booth (Manchester, UK) 1
Methods for quantitative determination of drug localized in the skin
E. Touitou, V.M. Meidan and E. Horwitz (Jerusalem, Israel) 7
Development of ciprofloxacin-loaded nanoparticles: physicochemical study of the drug carrier
M.-E. Page-Clisson, H. Pinto-Alphandary, M. Ourevitch (Châtenay-Malabry, France), A. Andremont (Châtenay-Malabry and Paris, France) and P. Couvreur (Châtenay-Malabry, France) 23
Effect of diffusion potential, osmosis and ion-exchange on transdermal drug delivery: theory and experiments
J. Hirvonen (Kuopio, Finland), L. Murtomäkiand and K. Kontturi (Helsinki, Finland) 33
A simple in vitro model to study the release kinetics of liposome encapsulated material
R. Peschka (Freiburg, Germany), C. Dennehy and F.C. Szoka Jr. (San Francisco, CA, USA) 41
In vitro degradation study of polyester microspheres by a new HPLC method for monomer release determination
P. Giunchedi, B. Conti (Pavia, Italy), S. Scalia (Ferrara, Italy) and U. Conte (Pavia, Italy) 53
Enhanced immune response after subcutaneous and oral immunization with biodegradable PLGA microspheres
M. Igartua, R.M. Hernández, A. Esquisabel, A.R. Gascón, M.B. Calvo and J.L. Pedraz (Vitoria-Gasteiz, Spain) 63
Thermally reversible xyloglucan gels as vehicles for rectal drug delivery
S. Miyazaki, F. Suisha, N. Kawasaki (Hokkaido, Japan), M. Shirakawa, K. Yamatoya (Osaka, Japan) and D. Attwood (Manchester, UK) 75
Factors influencing the diffusion-controlled release of papaverine from poly (L-lactic acid) matrix
M. Miyajima, A. Koshika, J. Okada, A. Kusai and M. Ikeda (Tokyo, Japan) 85
Studies of the internal flow process in polymers by ^{1}H NMR microscopy at 500 MHz
B. Madhu (Göteborg, Sweden), J. Hjärtstam (Mölndal, Sweden) and B. Soussi (Göteborg, Sweden) 95
Erythropoietin loaded microspheres prepared from biodegradable LPLG–PEO–LPLG triblock copolymers: protein stabilization and in-vitro release properties
M. Morlock, T. Kissel, Y.X. Li (Marburg, Germany), H. Koll and G. Winter (Mannheim, Germany) 105
Poly(vinyl alcohol) nanoparticles prepared by freezing–thawing process for protein/peptide drug delivery
J.K. Li, N. Wang and X.S. Wu (New York, NY, USA) 117
Ibuprofen release kinetics from controlled-release tablets granulated with aqueous polymeric dispersion of ethylcellulose II: Influence of several parameters and coexcipients
G.M. Khan and J.B. Zhu (Nanjing, P.R. China) 127
Growth factor release from amylopectin hydrogel based on copper coordination
Y. Tabata, Y. Matsui and Y. Ikada (Kyoto, Japan) 135
Synthesis of bioadhesive poly(acrylic acid) nano- and microparticles using an inverse emulsion polymerization method for the entrapment of hydrophilic drug candidates
B. Kriwet, E. Walter and T. Kissel (Marburg, Germany) 149
The application of microspheres from the copolymers of lactide and ϵ-caprolactone to the controlled release of steroids
B. Buntner, M. Nowak (Zabrze, Poland), J. Kasperczyk (Katowice, Poland), M. Ryba, P. Grieb, M. Walski (Warsaw, Poland), P. Dobrzyñski and M. Bero (Zabrze, Poland) 159

Experimental verification of the mechanistic model for transdermal transport including iontophoresis
J. Hirvonen (Kuopio, Finland), L. Murtomäki and K. Kontturi (Helsinki, Finland) 169
NGF release from poly(D,L-lactide-co-glycolide) microspheres. Effect of some formulation parameters on encapsulated NGF stability
J.-M. Péan, M.-C. Venier-Julienne, F. Boury, P. Menei, B. Denizot and J.-P. Benoit (Angers, France) 175
Application of vesicles to rat skin in vivo: a confocal laser scanning microscopy study
M.E.M.J. van Kuijk-Meuwissen, L. Mougin, H. Junginger and J.A. Bouwstra (Leiden, The Netherlands) 189
Preparation and characterization of biodegradable nanospheres composed of methoxy poly(ethylene glycol) and DL-lactide block copolymer as novel drug carriers
S.Y. Kim, I.G. Shin and Y.M. Lee (Seoul, South Korea) 197
Release of tetanus toxoid from adjuvants and PLGA microspheres: How experimental set-up and surface adsorption fool the pattern
P. Johansen (Zurich, Switzerland), G. Corradin (Epalinges, Switzerland), H.P. Merkle and B. Gander (Zurich, Switzerland) 209
Gamma irradiation effects on poly(DL-lactictide-co-glycolide) microspheres
L. Montanari, M. Costantini (Milano, Italia), E.C. Signoretti, L. Valvo, M. Santucci, M. Bartolomei, P. Fattibene, S. Onori (Roma, Italy), A. Faucitano, B. Conti and I. Genta (Pavia, Italy) 219
Monoacylation of ribonuclease A enables its transport across an *in vitro* model of the blood–brain barrier
J. Chopineau, S. Robert (Compiègne, France), L. Fénart, R. Cecchelli (Lille, France), B. Lagoutte (Gif-sur-Yvette, France), S. Paitier (Compiègne, France), M.-P. Dehouck (Lille, France) and D. Domurado (Montpellier, France) 231
Effect of the different factors on the iontophoretic delivery of calcium ions from bentonite
Zs. Szántó and L. Papp (Debrecen, Hungary) 239
Biocompatibility testing of ABA triblock copolymers consisting of poly(L-lactic-co-glycolic acid) A blocks attached to a central poly(ethylene oxide) B block under *in vitro* conditions using different L929 mouse fibroblasts cell culture models
R. Zange, Y. Li and T. Kissel (Marburg, Germany) 249
Chitosan and depolymerized chitosan oligomers as condensing carriers for in vivo plasmid delivery
F.C. MacLaughlin, R.J. Mumper, J. Wang, J.M. Tagliaferri (The Woodlands, TX, USA), I. Gill, M. Hinchcliffe (Nottingham, UK) and A.P. Rolland (The Woodlands, TX, USA) 259
Roles of acid/base nature and molecular weight in drug release from matrices of gelfoam and monoisopropyl ester of poly(vinyl methyl ether–maleic anhydride)
K.M. Hämäläinen, E. Määttä, H. Piirainen, M. Sarkola, A. Väisänen, V.-P. Ranta and A. Urtti (Kuopio, Finland) 273
In vitro dissociation of antifungal efficacy and toxicity for amphotericin B-loaded poly(ethylene oxide)-block-poly(β-benzyl-L-aspartate) micelles
B.G. Yu (Madison, WI, USA), T. Okano (Tokyo, Japan), K. Kataoka (Chiba, Japan), S. Sardari (Edmonton, Canada) and G.S. Kwon (Madison, WI, USA) 285
New preparation method of intestinal pressure-controlled colon delivery capsules by coating machine and evaluation in beagle dogs
Z. Hu, G. Kimura, S.-s. Mawatari, T. Shimokawa, Y. Yoshikawa and K. Takada (Kyoto, Japan) 293

Synthesis of bioadhesive poly(acrylic acid) nano- and microparticles using an inverse emulsion polymerization method for the entrapment of hydrophilic drug candidates
B. Kriwet, E. Walter and T. Kissel (Marburg, Germany) 149

The application of microspheres from the copolymers of lactide and ϵ-caprolactone to the controlled release of steroids
B. Buntner, M. Nowak (Zabrze, Poland), J. Kasperczyk (Katowice, Poland), M. Ryba, P. Grieb, M. Walski (Warsaw, Poland), P. Dobrzyñski and M. Bero (Zabrze, Poland) 159

Experimental verification of the mechanistic model for transdermal transport including iontophoresis
J. Hirvonen (Kuopio, Finland), L. Murtomäki and K. Kontturi (Helsinki, Finland) 169

NGF release from poly(D,L-lactide-co-glycolide) microspheres. Effect of some formulation parameters on encapsulated NGF stability
J.-M. Péan, M.-C. Venier-Julienne, F. Boury, P. Menei, B. Denizot and J.-P. Benoit (Angers, France) 175

Application of vesicles to rat skin in vivo: a confocal laser scanning microscopy study
M.E.M.J. van Kuijk-Meuwissen, L. Mougin, H. Junginger and J.A. Bouwstra (Leiden, The Netherlands) 189

Preparation and characterization of biodegradable nanospheres composed of methoxy poly(ethylene glycol) and DL-lactide block copolymer as novel drug carriers
S.Y. Kim, I.G. Shin and Y.M. Lee (Seoul, South Korea) 197

Release of tetanus toxoid from adjuvants and PLGA microspheres: How experimental set-up and surface adsorption fool the pattern
P. Johansen (Zurich, Switzerland), G. Corradin (Epalinges, Switzerland), H.P. Merkle and B. Gander (Zurich, Switzerland) 209

Gamma irradiation effects on poly(DL-lactictide-co-glycolide) microspheres
L. Montanari, M. Costantini (Milano, Italia), E.C. Signoretti, L. Valvo, M. Santucci, M. Bartolomei, P. Fattibene, S. Onori (Roma, Italy), A. Faucitano, B. Conti and I. Genta (Pavia, Italy) 219

Monoacylation of ribonuclease A enables its transport across an *in vitro* model of the blood–brain barrier
J. Chopineau, S. Robert (Compiègne, France), L. Fénart, R. Cecchelli (Lille, France), B. Lagoutte (Gif-sur-Yvette, France), S. Paitier (Compiègne, France), M.-P. Dehouck (Lille, France) and D. Domurado (Montpellier, France) 231

Effect of the different factors on the iontophoretic delivery of calcium ions from bentonite
Zs. Szántó and L. Papp (Debrecen, Hungary) 239

Biocompatibility testing of ABA triblock copolymers consisting of poly(L-lactic-co-glycolic acid) A blocks attached to a central poly(ethylene oxide) B block under *in vitro* conditions using different L929 mouse fibroblasts cell culture models
R. Zange, Y. Li and T. Kissel (Marburg, Germany) 249

Chitosan and depolymerized chitosan oligomers as condensing carriers for in vivo plasmid delivery
F.C. MacLaughlin, R.J. Mumper, J. Wang, J.M. Tagliaferri (The Woodlands, TX, USA), I. Gill, M. Hinchcliffe (Nottingham, UK) and A.P. Rolland (The Woodlands, TX, USA) 259

Roles of acid/base nature and molecular weight in drug release from matrices of gelfoam and monoisopropyl ester of poly(vinyl methyl ether–maleic anhydride)
K.M. Hämäläinen, E. Määttä, H. Piirainen, M. Sarkola, A. Väisänen, V.-P. Ranta and A. Urtti (Kuopio, Finland) 273

In vitro dissociation of antifungal efficacy and toxicity for amphotericin B-loaded poly(ethylene oxide)-block-poly(β-benzyl-L-aspartate) micelles
B.G. Yu (Madison, WI, USA), T. Okano (Tokyo, Japan), K. Kataoka (Chiba, Japan), S. Sardari (Edmonton, Canada) and G.S. Kwon (Madison, WI, USA) 285

New preparation method of intestinal pressure-controlled colon delivery capsules by coating machine and evaluation in beagle dogs
Z. Hu, G. Kimura, S.-s. Mawatari, T. Shimokawa, Y. Yoshikawa and K. Takada (Kyoto, Japan) 293